

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraphs commencing at page 5, line 3 and ending at page 7, line 20, as follows:

Thus, according to one aspect of the invention, a system for transmitting and receiving data formatted in IEEE 1394 standard between devices using a same IEEE 1394 broadcast channel includes a controller CPU interfaced to an internal [[a]] bus, a first 1394 interface connected to the bus via first physical and link layers, a first device using a broadcast channel and connected to the first interface, [[and]] a second 1394 interface connected to the bus, and a second device using the broadcast channel and connected to the second interface, ~~via second physical and link layers~~. The controller CPU is configured for 1) receiving data transmitted from one of the first and second devices via the bus, prefixing a attaching an identification (ID) header, which includes identification information corresponding to a recipient device determined based at least in part on a transmitting device, to the received data and retransmitting the received data with the prefixed ID header onto the bus, and 2) receiving data ~~prefixed~~ with the ID [[a]] header attached thereto, interpreting the ID header to identify which of the first or second interfaces should receive the data, and transmitting the data over the bus to the identified 1394 interface. The ID header, which is other than a 1394 header, is used to build the 1394 header based on information contained in the ID header.

According to another aspect of the invention, in a system for transmitting and receiving data formatted in IEEE 1394 standard between devices using a same IEEE 1394 broadcast channel, the system includes a controller CPU interfaced to a bus, a first

1394 interface connected to the bus, a first device using a broadcast channel and connected to the first interface, via first physical and link layers, and a second 1394 interface connected to the bus, and a second device using the broadcast channel and connected to the second interface, via second physical and link layers. The controller CPU is configured for receiving data transmitted over the bus and routing the data to either the first or second 1394 interface based on the received data using an identification (ID) header other than a 1394 header, the ID header contains information about the data and identification information corresponding to one of the first and second devices determined based at least in part on a transmitting device. The 1394 header is built based on information contained in the ID header.

In yet another aspect of the invention, the present invention provides a system for transmitting and receiving data packets formatted in IEEE 1394 standard, the system includes a controller interfaced to an internal bus, a first device using a broadcast channel and connected to the first interface, a second interface connected to the bus, and a second device using the broadcast channel and connected to the second interface. The controller is configured for 1) receiving data transmitted from one of the first and second devices via the bus, attaching an identification (ID) header and a subheader to the received data, the ID header including identification information corresponding to a recipient device determined based at least in part on a transmitting device, and retransmitting the received data with the ID header and subheader onto the bus, and 2) receiving data with ID header and subheader attached thereto, interpreting the ID header and subheader to identify which of the first or second interfaces should receive the data and which broadcast channel in the

identified interface should receive the data, and transmitting the data over the bus to the identified interface. The ID header, which is other than a 1394 header formatted in IEEE 1394 standard and contains information about the data, is used to build the 1394 header based on information contained in the ID header.

~~In yet another aspect of the invention, the present invention provides a configuration in which two or more digital video cameras, which transmit/receive data over the same IEEE 1394 broadcast channel, can be used in a video conference system. According to this aspect of the invention, a network video conferencing system includes at least one digital video camera for transmitting digital video data and at least one digital video camera for receiving digital video data at a local side, and at least one digital video camera for transmitting digital video data and at least one digital video camera for receiving digital video data at a remote side. All digital cameras at both the local side and the remote side use the same IEEE 1394 broadcast channel to transmit data. The network video conferencing system includes a local CPU interfaced to a local data bus, a first 1394 interface connected to a first digital video camera and connected to the local data bus via first physical and link layers, a second 1394 interface connected to a second digital video camera and connected to the local data bus via second physical and link layers, a network interface connected to the local data bus and to a local area network, a remote network interface connected to a remote data bus and the local area network, a remote CPU interfaced to the remote data bus, a third 1394 interface connected to a third digital video camera and connected to the remote data bus via third physical and link layers, and a fourth 1394 interface connected to a fourth digital video camera and connected to the remote data~~

bus via fourth physical and link layers. The local CPU is configured to 1) receive data output by the first digital camera from the first 1394 interface over the bus, prefix a header to the received data, and retransmit the received data over the bus to the network interface which transmits the data over the local area network to the remote network interface; and 2) receive data prefixed with a header over the local data bus from the network interface, interpret the header to identify which of the first or second 1394 interfaces should receive the data, and transmit the data over the local data bus to the identified 1394 interface which outputs the data to the at least one receiving digital video camera. The remote CPU is configured to 1) receive data off the remote data bus which has been transmitted over the local area network and which has been prefixed with a header, interpret the header to identify which of the third or fourth 1394 interfaces should receive the data, and transmits the data over the remote data bus to the identified 1394 interface for outputting at the at least one receiving digital video camera; and 2) receive data from the remote data bus which has been output from the at least one transmitting digital video camera via the third or fourth 1394 interface, prefix a header to the received data, and retransmit the received data with a prefix header onto the remote data bus which outputs the data with the prefix header to the remote network interface for output to the local area network.